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ABSTRACT

This final report describes the goals and activities of the Mentor Project, a feasibility study involving the use of handicapped employees as mentors to assist handicapped youth to make the transition from school to work. The first section details the context of the study, including the project's conception of the mentor experience, a review of vocational programming in Massachusetts, and considerations for research. Section II briefly outlines the technical objectives, involving the development of models for using successfully employed disabled workers as mentors; integrating special education, vocational rehabilitation, and vocational education resources; and utilizing industry volunteers in inservice training of vocational rehabilitation, special education, and vocational education staff. The third section details study methods and activities, including development of selection criteria, conduct of a needs assessment, interviews with industry personnel and service providers, and decisions concerning an advisory committee. Section IV provides information on the school needs assessment conducted at two comprehensive high schools, a technical high school, and a bi-county collaborative service program. Interviews with eight companies representing the area industries are described in the fifth section, and interviews with 19 service providing agencies are discussed in the sixth section. The final section concludes that the positive findings of the feasibility study support the development of a demonstration mentor model program. Appendices provide a brief description of the proposed mentor model, the questionnaire used in interviews with schools, and lists of the companies and service agencies interviewed. (CB)

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FINAL REPORT

THE MENTOR PROJECT: INVOLVING HANDICAPPED EMPLOYEES IN THE TRANSITION OF HANDICAPPED YOUTH FROM SCHOOL TO WORK

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SUMMARY

FINAL REPORT SUBMITTED BY: Harold Russell Associates, Inc.
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PRINCIPAL INVESTIGATOR: Sarah L. Patton, Senior Associate

SUBMITTED TO: U.S. Department of Education
Contract No. 300-84-0175

TOPIC 5: Research and Development of Models, Guides and Plans for Handicapped Populations

TITLE: The Mentor Project: Involving Handicapped Employees in the Transition of Handicapped Youth from School to Work

Project Summary: The purpose of the Phase I project was to conduct a feasibility study to collect information concerning industry volunteerism specifically in regard to using handicapped industry employees as mentors for disabled secondary students. Improving the transition of disabled youth from school to work was an overall goal. School systems, industry personnel, state agency representatives and additional service providers were interviewed to gather information concerning the mentor concept.

The results of the SBIR Phase I study support Harold Russell Associates' (HRA) observation that there is a need to enhance the prevocational programming or the world of work orientation for disabled students, in order to improve their transition from school to work or additional postsecondary education/training. The study's findings also support HRA's observation that handicapped youth lack role models and mentors who can assist them in choosing careers, preparing for careers and seeking a job. In addition, there are few systemmatic programs with schools involving industry volunteerism for disabled students.

Key Words Describing the Project: Handicapped Youth, School to Work Transition, Industry Volunteerism.

Anticipated Results and Commercial Application: The response to the mentor concept was supportive. Therefore, HRA developed a proposal for SBIR Phase II funding.

HRA proposes to operate a mentor program at three different school settings. The program will demonstrate the benefits which can be derived from a mentor relationship between disabled industry employees and disabled students. It will also demonstrate effective practices in establishing and maintaining these relationships. It will complete these practices in the form of a training manual. The manual will be marketed primarily to industries and school systems for the purpose of encouraging the establishment of similar programs elsewhere.

Several organizations have expressed an interest in the training manual. HRA's marketing efforts will start with these organizations. Because of the favorable response to the mentor concept, HRA is confident that there will be a receptive market for the training manual.

FINAL REPORT

I. Context of the Study

A. HRA Experience

The mentor concept as developed for the SBIR Phase I study is the result of information gathered through HRA experience in two areas, industry involvement with handicapped issues and school to work transition for disabled youth. HRA's involvement in section 504 and affirmative action training or assistance for Massachusetts' businesses provides knowledge as to the various industry programs offered for handicapped individuals. HRA has also gained insight as to program possibilities for involving industry personnel and handicapped individuals. In addition, HRA's experience in helping to develop and manage the Massachusetts' Project With Industry has been especially rewarding and has provided staff with a forum for learning and exchanging ideas concerning industry volunteerism.

Staff's previous experience with Massachusetts' school systems and the provision of services for disabled youth combined with HRA's recent national study on cooperative programming for disabled students to aid in the transition from school to work has also contributed to the thinking which led to the development of the mentor concept. It is clear that prevocational and vocational programming is critical for the successful transition of disabled students from school into the world of work. Handicapped youth may also require a unique set of intervention strategies within a continuum of support services in order to make a successful transition to independent adult life. HRA research and experience contributed to the following observations:

- Vocational programming for special needs students is not a widely accepted practice;
- The development of comprehensive services and new strategies for service delivery requires coordination among the various service agencies for disabled youth;
- Industry is an underutilized resource for involvement in vocational programming for disabled students.

B. Vocational Programming in Massachusetts

While the Massachusetts Department of Education, Divisions of Special Education and Occupational Education support the philosophy of providing comprehensive vocational preparation for handicapped students, actual programming in local school districts varies considerably. The result is that some students do not receive any vocational services at all, while many do not receive the mix of services necessary to prepare them for the world of work.

In Massachusetts, vocational skill training for secondary students is provided through a system of regional vocational-technical schools. Students leaving middle school decide to attend either a vocational-technical school or comprehensive high school. Inevitably, this system has led to the perception that the vocational-technical schools only prepare students for jobs and the comprehensive high schools prepare students for further training or education. Even though the Massachusetts Department of Education strongly encourages enrollment of handicapped students in vocational-technical schools, many vocational-technical schools remain reluctant and often resistant to serving the disabled student, especially the more severely disabled.* The majority of disabled students, therefore, attend comprehensive high schools or state/private institutions.

Because the majority of disabled students in comprehensive high schools do not go on to college, there is a critical need to provide prevocational training or world of work orientation for these students. Most school districts belong to special education collaboratives which sometimes provide vocational preparation programming for mainly the low incidence handicapped student. These programs are limited in number and do not service all handicapped students. The special needs students in vocational-technical schools fare somewhat better than their counterparts in comprehensive high schools. Nevertheless, vocational-technical schools, especially those more open to serving handicapped students, are realizing the necessity to provide more intensive world of work orientation for their handicapped students, than otherwise is provided. Industry can play an important role to improve education's vocational preparation offerings and to increase the number of handicapped students entering the work force.

C. Considerations for Research

As a result of its extensive research and training experience in integration of community and industry resources and the transition of handicapped students from school to work, HRA identified several problems to be considered and evaluated during the Phase I study.

a. Many handicapped youth lack accurate and current information about available entry level jobs, job requirements, training requirements and available resources. The infusion of career education principles into academic coursework is not a widely accepted practice in Massachusetts schools. Many special education teachers attempting to incorporate vocational materials into their curriculum rely on career outlook materials which

*It is required that 10 percent of a vocational-technical school enrollment must be special needs.

identify broad employment trends and general career paths. These materials are often not specific enough to address local job markets. Moreover, due to shifting economic conditions, these materials cannot reflect the current trends.

b. Special education teachers, vocational teachers and rehabilitation professionals need accurate information about the needs and practices of industry in order to effectively guide students and clients. Many teachers and rehabilitation counselors graduate from university-based training programs and proceed directly into positions where they must assist handicapped individuals in preparing for careers. Studies have shown that these professionals are unsure of opportunities in industry and are reluctant to initiate contact with industry representatives.

c. Industry involvement in career awareness and exploration activities for handicapped students has traditionally been conducted on an ad hoc basis and limited to such activities as occasional classroom presentations, participation in career fairs, and hosting of field trips. While these activities have been valuable, they usually involve industry managers who describe the opportunities within the company in general terms. Very rarely are disabled individuals utilized to make such presentations. As a result, students lack well defined input from disabled industry representatives who work at near entry level.

d. While industry managers have participated in boards and committees of training and placement projects, rarely are disabled employees representing entry level jobs and their supervisors involved with handicapped youth and adults in any systematic way. Occasional requests are made for disabled school or VR graduates to speak to groups of students or clients. This is rarely done as part of a coordinated program of vocational preparation.

e. There are few role models for handicapped youth and adults seeking entry level jobs. While the media does report accounts of disabled people overcoming great obstacles in order to succeed, students rarely come into contact with employed disabled adults and therefore have few models of success. As a result, they may be unsure of opportunities or have unrealistic expectations of what can be achieved.

f. Handicapped individuals lack mentors during job placement. Most job seeking programs focus on the development of contacts within the business world who can attest to the candidates' abilities and act as a referral source in identifying job leads. While entry level skills and abilities are essential, it is often a matter of who you know in addition to what you know. HRA believes that disabled individuals do not have well developed networks in business, particularly in connection with successfully employed disabled persons. Lacking "a friend in the business" many disabled youth and adults must rely on traditional personnel channels. While these channels may result in jobs, studies have shown that many individuals are hired as a result of efforts of relatives, neighbors and friends who are current employees.

These observations formed the basis of HRA's research into the feasibility and potential of using handicapped industry personnel as mentors for secondary students in special education. Additional models of industry volunteerism would also be considered during the course of the study. HRA hoped to support the assumption that industry volunteerism would improve the transition of disabled youth from school into appropriate work situations or post-secondary education. It was hoped that the study's findings would lay the foundation for Phase II model development and preparation of materials to be tested and then disseminated in the form of a training manual.

II. Phase I Technical Objectives

Objective 1:

Develop models for national use which will involve successfully employed disabled persons and their supervisors from high technology and related companies as mentors in improving the transition of handicapped youth from school to work.

Objective 2:

Develop models for integrating special education, vocational rehabilitation and vocational education resources so as to avoid duplication of industry involvement and overtaxing of volunteer resources.

Objective 3:

Develop models for the involvement of industry volunteers in joint in-service training of vocational rehabilitation, special education and vocational education staff.

III. Study Methods and Activities

Upon award of the Phase I contract, HRA staff's first activity involved the development of a project description. This description enabled staff to introduce the study's concept to a variety of people either through mail or in person. (See Appendix for copy of the Project Description.) The process of developing the project description required that staff develop a set of tasks necessary for successful completion of the study. Initially five tasks were identified. During the course of the study it became necessary to add another task, service provider interviews, in order to accomplish the study's purpose. The following is a detailed account of each of the six tasks and their accompanying activities. The results of the interviews will be described in a separate section.

A. Development of Selection Criteria and the Identification of School Districts to be Involved in the Study

Staff originally intended to develop the selection criteria in conjunction with representatives of the Massachusetts Department of Education, Divisions of Special Education and Occupational Education. It became evident, after initial contact with the Special Education/Occupational Education Coordinator, that they could assist in identifying secondary schools but preferred that HRA develop the selection criteria based on the needs of the study. In order to comply with this request, HRA staff developed the following criteria.

- School commitment to providing vocational programming for special needs students.

HRA staff felt that the absence of administrative commitment to the concept of vocational preparation of special needs students would result in refusal to participate in the needs assessment or lack of information concerning the vocational needs of disabled students.

- Coordination between special education, vocational education and vocational rehabilitation.

The mentor program concept was not developed in order to solve coordination problems but to enhance or improve existing mechanisms which provide for a continuum of services. The state education representative suggested that HRA consider schools that had received from the state, joint funding between special education and occupational education to improve vocational services for special needs youth. Vocational rehabilitation coordination is discussed at the end of this section.

- The school district would benefit from such programs.

HRA staff wanted to work with schools that needed assistance in improving their vocational services for disabled youth to ensure that the program would be filling a need.

After consulting with the state education representative another criteria was added.

- Selection of at least one of each of the three types of secondary school settings which can provide vocational programming for disabled youth: comprehensive high school, vocational-technical school, and a special education collaborative.

Based on the above selection criteria the education representative suggested seven possible school settings to participate in the needs assessment. After contacting the schools and screening for interest, the list was narrowed to four school settings for participation in the study. One vocational-technical school, two comprehensive high schools and one special education collaborative were selected to participate: Shawsheen Valley Technical High School, Lawrence and Scituate Comprehensive High Schools and the Bi-County Collaborative.

The state office of the Massachusetts Rehabilitation Commission (MRC) was contacted concerning the feasibility study and reaction to the mentor concept. The MRC representative distributed copies of the project description to the Regional Offices which service the seven school districts being considered for participation in the study. It became evident that MRC involvement with the schools was minimal and could not be considered as a factor in deciding the four school settings for participation. However, staff did receive enthusiastic support for the mentor concept and a willingness to explore areas in which MRC could become involved. The MRC interviews are described in Section VI of this final report.

B. Development and Conduct of a Needs Assessment of Selected School Districts

The needs assessments of the three schools and one collaborative focussed on the following categories: (1) background information including geographic and socio-economic characteristics of the district served by the schools and collaborative, school programming and special education programming; (2) vocational programming including prevocational offerings, vocational-technical training, work/study programs, barriers to vocational programming, and development of vocational goals for IEP; (3) coordination including interaction between special education and vocational education, coordination with MRC and other state or private service providers and relationships with the middle schools; and (4) industry involvement including job development, industry/education cooperative ventures, and reaction to the mentor concept. (See Appendix for questionnaire format.)

The purpose of the needs assessments was to assist staff in verifying: the status of vocational preparation for special needs students, the level of industry involvement with schools, school personnel's views on industry volunteerism and what activities would be most effective, whether or not there would be a sufficient number of youth who could benefit from a mentor program, and whether or not there were sufficient number of high technology companies in the area.

C. Identification of Potential Companies to Become Involved In the Study

Over the years HRA has developed many close relationships with various high technology companies in the Boston metropolitan area. Staff primarily contacted representatives of these companies to interview concerning the mentor concept. This avoided the time-consuming activity of writing unknown industry representatives and waiting to receive approval for an interview session. Through the school needs assessments, staff were also able to identify additional companies to contact, if Phase II funding is approved and for marketing purposes.

D. Interviews of Industry Personnel to Explore the Potential for and Limits to Volunteerism

A standard questionnaire was developed for interviewing industry representatives. The questionnaire focussed on gathering information concerning: affirmative action policies, company programs for disabled employees, company programs with school systems, and reaction to the mentor concept. HRA staff hoped that the industry interviews would provide information about companies' attitudes toward working with disabled people, school systems and disabled students. (Please see Appendix for the Industry Interview Questionnaire.)

E. Interviews with Service Providers to Explore the Mentor Concept

As previously mentioned, this task was added as HRA staff began to realize that more information was needed concerning the feasibility of operating a mentor program and that service providers could provide additional sources for mentors. A formal questionnaire was not developed because of the variety of service providers interviewed and the varying purposes for interviewing these different service providers.

F. Preparation of a Model Utilization Plan for Involvement of Industry Volunteers as Mentors in Coordinated Programs Between Special Education, Vocational Education and Vocational Rehabilitation

The various needs assessments and interviews provided HRA staff with enough information to refine the mentor concept and develop a plan for program operation/model utilization for Phase II funding. A description of the program model developed for the

Phase II proposal is provided as part of the conclusion of this final report.

G. Advisory Committee

HRA staff initially intended to convene a Project Advisory Committee in order to provide guidance to the staff throughout the course of the project. Contacts with the Massachusetts Division of Special Education, the Massachusetts Rehabilitation Commission and Raytheon Company were initiated quickly upon reward of Phase I funding to seek advice and help in initiating the feasibility study. This advice was needed before an advisory committee meeting could be arranged. Scheduling problems then arose which caused delays in planning and holding a meeting. As a result, because of the short nature of the contract and because of the high level of support and advice provided from one to one interaction, it was decided to continue advisory participation on an individual rather than group basis.

IV. School Needs Assessment

A. Background Information

Because the school needs assessment encompassed a broad range of communities with very different populations and very different economic settings, the background characteristics of each site will be discussed separately, below.

Lawrence Comprehensive High School

Lawrence is an older, economically depressed city with a large hispanic population. Its primary industries have been paper packaging, textiles, and shoe manufacturing. The high technology industry is just beginning to develop in the area.

There are approximately 1,350 special needs students in the Lawrence schools, over 15% of the school population. These students represent the full range of handicapping conditions including learning disabilities, hearing and visual impairments, mobility impairments, and mental disabilities. Lawrence has a large mentally retarded population.

The majority of handicapped students in Lawrence are mainstreamed to some degree. In addition, there are diverse special education programs ranging from bilingual resource rooms to substantially separate programs for mentally retarded students, emotionally disturbed students, severely learning disabled students, and hearing-impaired students.

Shawsheen Valley Technical High School

Shawsheen serves five communities which are growing rapidly because of the high tech industry. The communities represent an economic mix ranging from blue collar to upper income. They are steadily moving from blue collar to professional, however.

Shawsheen has an enrollment of about 1,600 students of whom 275 are special needs. The special needs include mild mental retardation, learning disabilities, visual impairments and behavior disorders. Shawsheen also serves some multi-handicapped and some TMR students. Some special needs students are totally mainstreamed with monitoring by the special needs resource teacher. The majority of special needs students attend a resource room as well as regular classes. Other students attend self-contained academic classes but are integrated into shop areas with the assistance of aides.

Scituate Comprehensive High School

Scituate High School is located in an affluent area with a summer resort economy. There are many restaurants, shops, and services but there is no local manufacturing. The closest high tech firms are several towns away.

Scituate has a total school population of 3,026 and there are 118 special needs students in the high school. Scituate is a very college-oriented community and most learning disabled students are mainstreamed into academic programs. There are no hearing-impaired or blind students at present in the high school but students with these disabilities are generally mainstreamed as well.

Scituate has a very high mentally retarded population and there is a great deal of awareness in the community regarding this disability. The parents are well-informed, active in consumer organizations and very involved in their children's programming. The high school serves mildly to severely retarded students and all are well-integrated socially.

Bi-County Collaborative

The Bi-County Collaborative (BICO) serves forty-five different cities and towns in southeastern Massachusetts. The area encompasses both comprehensive high schools and vocational-technical schools. Area industry is varied, including high tech firms, manufacturing companies, and jewelry companies.

BICO exists to provide joint educational programs and/or services for member districts. It is governed by a policy board of fifteen designated school superintendents and a representative of the Southeast Regional Educational Center. Its programs range from Preschool and Early Childhood Development Centers to vocational programs for secondary school students. It serves a wide range of handicapping conditions, particularly severely handicapped, low-incidence students. Its vocational programs are generally located within comprehensive high schools or area vocational-technical schools.

B. Vocational Programming

Each of the needs assessment sites has recognized the importance

of vocational programming for disabled students and has developed special programming in this area. All agreed, however, that more vocational programs are needed. Some of the specific programs which have been developed are as follows:

Lawrence

Lawrence runs a vocational program for mildly to severely impaired mentally retarded students which received joint funding from the state Divisions of Special Education and Occupational Education. Students in this program receive a half-day of academics and a half-day of prevocational training. The program focusses on developing the behaviors and social skills necessary to hold a job. The program emphasizes the importance of industry connections and there are plans to hire an industry liaison staff person.

Special needs students have access to several other vocational options. They may participate in high school courses in auto mechanics, distributive education, electronics, culinary arts, drafting, or woodworking. These courses operate at a less advanced level than those of the area vocational-technical school. Lawrence has received a JTPA grant to run a work experience program and some special needs students participate in this. Some special needs students also participate in the school's work-study program.

With the exception of the mentally retarded students, pre-vocational programming is not available to special needs students on a regular basis. Its provision depends on individual teachers. Moreover, with the exception of those in the jointly-funded program, special needs students seldom have vocational goals in their IEP's.

Shawsheen

Because Shawsheen is a vocational-technical school, all of its courses are vocationally-oriented. The first year is exploratory and then a trade area is assigned. The school is in the process of developing a competency-based curriculum. In the mean time the present curriculum is adapted to the special needs of students. Modifications have also been made in the shop areas when necessary.

Shawsheen also runs Project Score, a special prevocational/vocational program for severely handicapped students. The goal is to provide them with sufficient skills in three years for eventual placement in industry. Skill areas include graphic arts, culinary arts, and metal fabrication. Where possible, students progress into Shawsheen's regular program. Project Score serves learning disabled, mentally retarded and emotionally disturbed students.

Counselors meet with junior high staff to develop initial vocational goals for the IEP. Every year the IEP is reviewed.

The school has computerized objectives for each trade area so that individualized tasks and skills can be listed in the IEP.

Shawsheen operates a co-op program for seniors in which they work one week and attend school the next. They receive credit in addition to being paid by their employer. Some special needs students participate in this program.

Scituate

Scituate's vocational programs focus primarily on mentally disabled students. Because Scituate is a very college-oriented community, learning disabled students generally remain in academic classes. The school is now trying to involve learning disabled students in their special vocational programs.

Scituate offers two major programs. The School-to-Community Transitional Employment Program serves mild to moderate mentally disabled students. Sheltered workshop training within the school is provided for more severely retarded students.

The Transitional Employment Program has three phases. The first phase includes prevocational attitudinal and skill training. Students participate in a daily prevocational class and receive skill training, making use of school resources, e.g., food service is taught in the school cafeteria. In the second phase the student participates in community-based work experience program. The student, the teacher, and the consultant agree on a community training site. The consultant provides direct supervision to the student for a limited time and then maintains weekly communication with the student and the employer. The consultant keeps a log on student progress and prepares quarterly reports for the student, teacher, and parents. In phase three of the program the consultant approaches employers with successful trainees and explores opportunities for employment.

As mentioned earlier, Scituate is a resort community and has no local factories or large industries. Local businesses are very receptive to hiring handicapped persons, however. Placements have included restaurants, supermarkets, nursing homes, pet grooming shops, garden shops and similar small businesses. Placements generally occur in or near Scituate since there is no public transportation and many of the students involved do not drive.

Scituate special needs students make little use of the area vocational-technical school. The curriculum is not competency-based. Moreover, the school has been hesitant to accept mentally retarded students in the past. It has cited safety issues and has voiced other reservations about their ability to participate in the vocational training offered.

BICO

BICO provides both prevocational and vocational programs at the

secondary school level. It also offers intermediate-level prevocational programs. Parents in the area are pushing more and more for vocational programs, finding that there are still not enough in local high schools.

BICO's programs include the Work Lab for mentally retarded students, the Learning Center for emotionally disturbed students, and a hearing-impaired program at a local vocational school. BICO also runs Project Share for learning disabled/behaviorally disturbed students. In this program students are integrated within the shop areas of a comprehensive high school. A vocational special needs instructor runs a resource shop and serves as a liaison with the regular vocational education instructors. Another program for the learning disabled is the Intermediate Skill Development Program which is located in an area vocational school.

BICO employs a vocational specialist to work with its special programs. The specialist provides vocational counseling and works on behaviors and attitudes. The specialist also provides guidance on proper dress, filling out applications, and interviewing. When students are ready to begin work experience, the specialist seeks out job sites and makes placements. Examples of placements include hotels, nursing homes, and fast food operations.

Most BICO students at the high school level have vocational goals in their IEP. Vocational counselors and program people develop the goals. Where possible shop teachers are included in this process.

As in other areas BICO has found some vocational-technical schools to be hesitant to serve special needs students. They screen very closely and put a great deal of emphasis on outcomes. They are now beginning to make accommodations, however.

C. Coordination

All of the needs assessment sites have some degree of contact with vocational rehabilitation. The typical VR involvement consists of outlining the referral process and accepting referrals as students near graduation. The type of contact varies with the VR counselor. At Shawsheen contact is generally by telephone, while in Scituate the counselor makes regular visits to the school.

The school people welcomed VR involvement and expressed the desire that VR get involved in early planning for students. They mentioned that they could particularly use VR assistance in working with severely-disabled students who might be able to succeed in competitive employment given the proper supports. At present, many of the students referred to VR go into sheltered employment. Several school systems expressed the hope that Massachusetts' new Chapter 688 (transitional planning) will result in earlier involvement on the part of VR.

The needs assessment sites maintain contacts with a variety of other agencies and organizations. The staff persons involved with programming for the mentally disabled usually work with the Department of Mental Health. Scituate and Shawsheen have worked with JTPA to obtain funding for special projects. Scituate also works with local and state advocacy organizations such as ARC's and with the Special Education Department of Boston College. BICO also works very closely with local parent groups.

D. Industry Involvement

None of the needs assessment sites have achieved significant industry involvement in vocational programming for special needs students. All recognize the importance of industry involvement and are committed to working in this area. The major success of the schools to date has been in establishing work experience programs utilizing local businesses as work sites.

Lawrence is currently involved in an industry-initiated business-education collaborative. The collaborative has not yet identified specific goals or projects nor has it focussed on disabled students. Lawrence has also made industry contacts regarding its vocational program for mentally retarded students. The school staff would like to establish industry tours and to shape the curriculum to better suit industry needs.

At Shawsheen each shop area has its own craft advisory committee to ensure that training meets the needs of the local labor market. Shawsheen also has a general advisory committee made up of industry personnel. Moreover, through its placement efforts, Shawsheen has made contact with all of the major companies in the area. None of its efforts, however, have particularly focussed on special needs students.

As noted above, there are no major industries in the Scituate area. The school system maintains an excellent relationship with many smaller local businesses. Because of the town's high incidence of mental retardation, it is a very aware community and many local businesses employ retarded persons. Local businesses have been receptive to using work experience students and, in some instances, handicapped employees have served in an informal mentor role to students placed. Scituate also maintains a list of local business people who are willing to serve as speakers on different occupational areas.

The BICO Collaborative has a long history of working with industry. In fact, the Director of the collaborative served as the chairperson of the local business-education collaborative for over three years. Despite good intentions the business-education collaborative was unable to start up an actual program. The BICO director was able to list several specific reasons for this. The business-education collaborative lacked funding and the staff to maintain coordination efforts. The collaborative's monthly meetings were not sufficient to sustain actual programming. The collaborative's efforts demanded a great deal of the time of the

BICO Director and his own BICO board questioned the appropriateness of this. On the industry side, there was a great deal of staff turnover, and an economic slowdown to contend with. Moreover, the staff assigned to the collaborative often did not have decision-making authority.

Despite past problems, BICO would like to re-establish a formal relationship with area industries. A successful program would require involvement of decision-makers on both the education and the business side and the the availability of staff people to coordinate efforts and maintain contacts.

The BICO staff is also very interested in getting individual students into industry for vocational orientation purposes. As in Scituate, some students have been placed in work sites which already had developmentally disabled employees. As in Scituate, some informal mentoring has occurred as a result.

E. Reaction to Mentor Concept

All of the needs assessment sites strongly supported the concept of a mentor program and saw it as benefiting both the students and the companies involved. On the company side, the mentor project was seen as a vehicle for attitudinal change. Bringing handicapped students into the work place would bring greater awareness of handicapped people and of the broad range of handicapping conditions. It would also provide an opportunity for the mentor to work with the employer and other employees to develop a better support system for handicapped persons on the job. The mentor also would benefit from the program's recognition of his/her capabilities and by providing an opportunity to make a contribution to the development of others.

Many potential student benefits were listed. Some teachers noted that many special needs students have self-esteem and socialization problems which present barriers to employment even when the proper technical skills are present. They also have fears about how they will cope with the world of work. Actually seeing a disabled person on the job might take some of their fears away. It would also provide them with a role model. Talking to disabled workers could help special needs students in developing realistic vocational goals. It could also give them ideas on possible job accommodations. Several school people added that this type of information would be useful for parents as well as students.

Shadowing was seen as beneficial because it helps in breaking down the elements of a job. It can also provide concrete examples of subjects taught in class. Shadowing was viewed as one of the most important elements of a mentor program.

The sites felt that nearly all of their special needs students could benefit from a mentor relationship. They added, however, that student needs vary according to handicap and other personal factors and that the design of the mentor program must take this

into account. Some staff members, for example, mentioned that many behaviorally disordered students do not like to be associated with the idea of a handicap and that care would have to be taken in "selling" the program to them. Others mentioned that a learning disability is a hidden handicap and that it may be difficult to identify learning disabled mentors in the work force. A number of school people mentioned that mentally retarded students seldom had an opportunity such as this and that it would be very important for them to participate. In fact, in Scituate and at BICO, mentally retarded students were seen as the population most in need of a mentor experience. Learning disabled, behaviorally disordered, and hearing-impaired students were other groups specifically mentioned at the sites as needing mentors.

School staff people supported the mentor concept as a vehicle for networking. They noted that the networking which would result would benefit them as well as their students. They added that they would like to work with industry but often do not know where or how to start. They expressed the hope that the mentor program would lead to other types of industry involvement.

None of the needs assessment sites saw any problem in assigning staff to work with the mentor program or in allowing students to participate. They did, however, identify several issues as needing to be addressed in the design of a mentor program. They were uniform in stating that transportation is always a problem in involving students in off-site programs. Students are too young or otherwise unable to drive and parents are often unavailable. Some parents are very concerned about students losing their eligibility for benefits such as SSI if they participate in vocational programs. On the industry side, concerns about safety and insurance are often raised as barriers to having students on site.

School Needs Assessment Findings/Implications for Phase II

- School systems recognize the need for more vocational programming options for handicapped students.
- School systems have tried to obtain industry involvement but have not been successful in establishing on-going programs focussing on handicapped students.
- School systems have found that special needs students have low self-esteem and have many anxieties about going into the work place.

Implications

- All of these findings point to the need for a program such as the mentor program. Students have limited opportunities to get actual knowledge of the work place before they leave school. They are not sure about what kinds of jobs are available to them and what kinds of

jobs they could do. They are not sure how people will accept them or treat them on the job. They have seldom had working disabled adults as role models. The mentor program could meet these needs. It could also provide a focus for the beginning of regular contact between the schools and industry.

- The needs assessment sites serve a broad range of handicapped students and feel that the mentor would be appropriate for almost all of them.

  Implications

  - The mentor program must be designed in a way that will allow it to accommodate a broad range of handicapped persons. Simply matching physically handicapped employees with physically handicapped students will not meet the needs of the schools.

- Disabled students have varied needs depending on their disability and their personal situation.

  Implications

  - The matching process must be designed so as to be sensitive to the individual needs of the students. An individual mentor plan with special objectives must be developed for each participating student.

- The needs assessment sites have existing vocational programs for disabled students which could serve as a basis for the mentor program.

  Implications

  - The mentor program should tie in with existing vocational programs and complement them. The mentor program staff should develop close relationships with the teachers in these programs, keep up to date on course content, and try to develop mentor relationships which are relevant to the school experience. The mentor staff can also serve as a conduit for conveying industry suggestions to the school staff and for enhancing course content as a result of the mentor experience.

- The needs assessment sites are not actively involved in programming with vocational rehabilitation agencies.

  Implications

  - The mentor program staff will not be able to rely on existing relationships between the schools and vocational rehabilitation in implementing the program. The mentor program staff will have to take active steps

to involve vocational rehabilitation and to use VR's resources in identifying mentors.

- Most of the students at the needs assessment sites have vocational objectives in their IEP's but the objectives often lack specificity.

  Implications

  - Existing vocational objectives can, in some instances, serve as the basis for development of the mentor plan.

  - Mentoring planning can, in other cases, assist the schools in the development of more specific vocational objectives.

- Informal mentoring has occurred in some existing work experience programs and students have benefited from it.

  Implications

  - Development of a mentor program would ensure that a larger population of students would have access to mentors and the mentoring would occur on a regular, rather than an ad hoc, basis.

- The needs assessment sites were particularly interested in shadowing experiences for their students.

  Implications

  - Shadowing should be an important component in the design of the mentor program.

- The needs assessment sites uniformly identified transportation as a potential problem area in the operation of the program.

  Implications

  - In the design of the mentor program, provision must be made for transportation to and from the mentor site for students who do not have access to other arrangements.

- Safety issues are often raised as barriers to having handicapped students on the work site.

  Implications

  - The mentor staff will have to address safety issues and correct any misconceptions in making industry contacts during the initial stages of the project.

- Learning disabilities are generally hidden handicaps and employers may not be aware of learning disabled employees.

Implications

- The mentor staff will have to develop alternative resources for identifying learning disabled employees. Vocational rehabilitation and consumer groups are possible sources of mentors. It will be important to identify learning disabled mentors because learning disabled students have been named as one of the groups most in need of a mentor experience.

- The needs assessment sites are willing to assign staff to work with the mentor staff.

Implications

- Lack of access to school personnel will not be a barrier in initiating the program. The mentor staff should, however, make sure that the liaison staff are assigned early on and begin to establish strong relationships with them immediately.

- The needs assessment sites varied in the availability of local industries to work with in establishing a mentor program.

Implications

- Location and availability of local industries determined the selection of the sites to be included in Phase II. Lawrence and Shawsheen are in physical proximity to each other and could work with the same pool of industries. For this reason, they will be the first schools to participate in the mentor program. BICO is in a different section of the state and would require additional logistics on the part of the mentor staff and the development of an additional pool of industries. For this reason, BICO will not be added until the second year of the project. Scituate has no local high tech or large industry and would require a great deal of contact with small businesses with a very limited pool of mentors. For this reason, Scituate has not been proposed as a site for Phase II.

V. Industry Interviews

The eight companies that participated in the Phase I feasibility study were representative of the larger high technology companies in the Boston metropolitan area. In general, all of the company representatives indicated interest in and support for the mentor concept. They were willing to explore with HRA the pros and cons of starting a mentor program with school systems and were receptive to future participation, should HRA receive Phase II funding. The following is a brief summary of the content of the interviews. (see Appendix for industry questionnaire and list of industries interviewed.)

All of the companies had an affirmative action policy with regard to handicapped employees. Some companies were more active than others in recruiting disabled people. The agencies used for recruitment were primarily Massachusetts Project With Industry and the Massachusetts Rehabilitation Commission. However, most of the companies felt that employee referrals were the best source for hiring and as a result they receive some handicapped applicants that are not served by the traditional job placement agencies for disabled people.

All of the companies had at least one person designated to work on handicapped issues. The responsibilities of this person varied according to the degree of activity concerning affirmative action training for employees and involvement in community programs. Four of the companies had received some type of limited awareness/sensitivity training concerning handicapped employees. Most of the companies had participated in or were presently participating in community programs. However, only three companies were actively involved with school systems. Actual participation in programs for disabled students was nonexistent or minimal if offered. Only two companies, the Corporate Headquarters of Digital and Raytheon, have active on-going programs involving handicapped students. This limited survey corresponds with past HRA experience that most companies in the Boston metropolitan area do not actively engage in programs for disabled students.

Massachusetts companies are becoming more and more responsive to the needs of school systems and as a result the number of industry/education programs have increased significantly. Also, as evidenced by the Corporate Partnership Program of the Governor's Commission on the Employment of the Handicapped and the Massachusetts Project With Industry, private companies are becoming more aware of the needs of handicapped people. The climate appears conducive to encouraging greater participation of industry in special education programs.

As stated, all of the companies were supportive of and interested in the mentor concept of matching handicapped employees with handicapped students to improve the students world of work orientation. Therefore, the barriers and problems involved in implementing such a program were explored. The identification of handicapped employees was viewed as a significant problem. While many employees, primarily the physically handicapped, were known to the Personnel Department, it was felt that there were many employees with hidden disabilities that had not been identified. Past affirmative action invitations have received a low response rate. Self-identification therefore has not been a successful method of recruitment for special programs and/or assistance. Another potential problem is the small number of entry-level jobs available in high technology companies for high school graduates. Entry-level positions include: janitorial, mailroom, assembler, clerical, shipping and receiving and sometimes food services if not contracted out by the company. Most of the technical jobs require more than a high school degree. If mentors are to be

recruited only from entry-level positions then the number of potential mentors will be even smaller. Companies with high security defense contracts could also result in a limited number of potential employees to act as mentors. Student shadowing of employees would not be possible in high security areas.

Most of the companies did not have a fixed policy concerning volunteer time for employees during work hours. Company sponsorship of the mentor program was viewed as critical for obtaining release time for employees to participate in volunteer work. Company participation would also provide an incentive for an employee to volunteer his or her efforts toward the program. Volunteerism was an idea that either was encouraged or viewed as an area for further consideration and action.

Two companies had offered programs for high school students involving shadowing activities. Both companies had positive experiences concerning these programs and expressed great interest in providing shadowing experiences for disabled students. Digital Equipment Company taped a shadowing experience and suggested to HRA that this type of video tape could be used to market the mentor concept to other companies.

Industry Interview Findings/Implications for Phase II

- Self-identification of handicapped employees for affirmative action programs and training has not been a successful recruitment method. This could result in a small number of employees available to act as mentors.

  Implications

  - HRA will need to seriously consider different ways of publicizing the mentor program within a company in order to emphasize the benefits of becoming a mentor.

  - HRA will need to utilize other sources to identify a pool of handicapped employees to act as mentors. These sources of mentors should include clients from the Massachusetts Rehabilitation Commission, the Commission for the Blind, transitional employment programs, supported work programs, and handicapped advocacy groups.

  - HRA will need to consider using industry employees who may not be disabled but have a special sensitivity for the problems of disabled people.

- Companies have found that employee referrals are the best source of applicants for jobs including those people with handicapping conditions.

  Implications

  - This finding supports HRA's observation that most

students find jobs through family and friends. Developing a "friend in the business" network for disabled youth should help increase the number of handicapped students finding jobs.

- There are few entry-level positions in high technology companies available for high school graduates.

  Implications

  - Mentors should be recruited not only from employees in entry-level positions but also from employees who have progressed past the entry-level as a result of further education and training. Many handicapped students have the ability to pursue further education and training but because of low self-esteem and unrealistic perceptions of the work place do not consider post-secondary education as an option.

  - Because of the limited number of available jobs, it is even more important for handicapped students to develop the job skills and job search mechanisms necessary to obtain these jobs.

- The company will need to sponsor the mentor program in order to provide work release time for the employee to act as a mentor.

  Implications

  - If service providers are used as sources for mentors, the potential volunteers will have to agree to have their company approached as a program sponsor. This should not be a problem given that the service providers HRA is considering for Phase II, conduct job placement for their own clients. The companies, therefore, are aware of the person's disabilities.

- Companies have found that participation on an industry/education committee often does not result in any specific tasks that industry can do for schools.

- Very few companies have worked with school systems on a regular basis especially concerning the needs of disabled students.

- Companies in general are very supportive of the mentor concept and are willing to work with HRA to develop a program.

  Implications

  - The three findings listed above support HRA's belief that there is good potential to develop a mentor program. Industry has been a relatively untapped

resource. Companies are willing to participate so long as someone can provide guidance and a specific program for their involvement.

VI. Service Provider Interviews

Interviews with service providers are divided into two categories, state agency representatives and private volunteer or employment programs. The intent of the Phase I study was to use state agency representatives from the Massachusetts Rehabilitation Commission and the Divisions of Special Education and Occupational Education as advisors. From conversations with both state and industry representatives, HRA realized that it was necessary to also gather information from private service providers and advocacy groups for several reasons. It became evident that the personnel departments of high technology companies would be unable to provide HRA with a large group of employees to act as mentors. As a result, HRA decided to contact employment programs for handicapped people in order to develop another source for mentors. Because these programs are involved in employment and training of handicapped individuals, staff could also provide insight as to the potential problems and benefits of operating a mentor program. HRA also discovered other mentor-type programs operating in Massachusetts. It was necessary to verify whether or not the HRA mentor program would be filling a need and would complement rather than compete with existing programs. These programs were also a valuable source for information concerning program operation. (Please refer to Appendix for the list of service providers.)

The special education/occupational education coordinator from the Massachusetts Department of Education was especially helpful in identifying possible secondary schools and special education collaboratives for participation in the HRA study. One of the Department of Education's goals is to improve the vocational programming options available for special needs students. They are very supportive of the mentor concept because of the industry involvement with secondary schools and the increased attention to pre-vocational, world of work orientation for special needs students.

Representatives from the Massachusetts Rehabilitation Commission (MRC) also provided advice concerning the study. There was strong support for the concept based on the view that most secondary schools could do a better job preparing disabled students for employment. This in turn would aid MRC's efforts in finding jobs for students referred from secondary schools. MRC representatives also felt that past MRC clients would be a good source for potential mentors. MRC regional offices can assist HRA in identifying past clients for a pool of mentors. It was also noted that given the few entry-level jobs available in high technology companies, it was a valuable lesson for special needs students to realize that many jobs require further education and/or training.

Three MRC regional offices responsible for the schools involved in the needs assessments were also contacted for reaction to the mentor concept. The Lowell Regional Office contact thought that the mentor concept was an excellent idea. He pointed out that many vocational rehabilitation (VR) clients wanted to give something back in return for VR services. The mentor program would provide them with a good opportunity to do this. He said that a survey of counselor caseloads would be an effective method for identifying potential mentors. The VR counselor could list possible mentors and then contact them to find out whether they would be interested in participating. He noted that most high schools in his area do not have linkages with industry. He also felt that the mentor concept was appropriate for all handicapping conditions. However, he was doubtful whether the concept would be successful for mentally ill people. A psychiatric client probably has coping problems which would make mentoring a difficult activity.

The contact at the MRC Taunton Regional Office also thought the mentor concept was a good idea. He noted that there was an informal network of past MRC clients who help each other and new MRC clients. This type of personal interest he felt was critical in helping VR clients to excel. In addition, this informal network makes MRC a good source of mentors. In commenting about schools, he felt that the majority of special needs students were being trained in laundry, food service and janitorial work. He would like to see a broader range of training and work sites opened up to special needs students. A mentor project might be one way of increasing the options available to special needs students. Some students who have been placed in sheltered employment could have succeeded in competitive employment if they had received appropriate training and support. He felt that disabled students could benefit greatly from the special attention which would be provided by a mentor type program.

The MRC Quincy Regional Office contact was also supportive of the mentor concept in that it would provide an excellent way of introducing students to the world of work. She has tried to develop a similar approach for VR clients, by linking former clients with new VR clients. At present the system is working informally. She definitely felt that MRC would be an important source for mentors and that it would be helpful to match disability groups. Most referrals from high schools are learning disabled or mentally retarded students. She very rarely receives referrals of students with psychiatric problems. She felt MRC was an excellent source for identifying mentally retarded people who are working successfully in industry. She supported HRA's findings that employers often are unaware of employees with hidden disabilities. This is also true for people with learning disabilities who are used to covering up their disability and do not identify themselves to their employer. She agreed that it was important to use some mechanism other than employers to identify learning disabled mentors.

Several employment, training and/or job placement programs for disabled individuals were contacted for information concerning the mentor concept and whether or not they would be a good source of mentors. The majority of the program representatives expressed support for the idea and a willingness to work with HRA to identify mentors, should HRA receive funding. Most of these programs serve adult clients. A clear message was that many of these clients would be better prepared for work if they had received appropriate vocational preparation in secondary school. Industry involvement in schools was viewed as critical to this process.

The Governor's Commission on the Employment of the Handicapped and the Information Center for Individuals with Disabilities felt that the mentor concept was an excellent idea. They agreed to help HRA access Boston area companies for participation in the program. These agencies will be a good source for publicizing the program.

Mentor type programs represent the final category of service providers interviewed by HRA staff. These programs proved to be an invaluable source of information concerning the need for such a program and the problems in operating a mentor program. Three agencies, Big Brother Association of Boston, Partners Project of the Boston Center for Independent Living, and Mentor, Inc. were interviewed.

It became clear that the HRA mentor concept was substantially different from the programs operated by these three agencies. However, the theme of matching young people with adults to give advice was the same. Both the Big Brother and Partners programs primarily involve adults in volunteer work unrelated to their work situation. The adult acts as an overall friend and confidant and becomes involved in leisure time activities. The Big Brother Association was beginning to investigate the possibility of starting a program for disabled youth and when possible would match the youth with a disabled adult. The program would focus primarily on the physically disabled student. The Partners Program is a small program for disabled youth attending private schools in Boston. The administrators of both programs were interested in the HRA mentor concept and expressed willingness to coordinate whenever it was feasible. The Partners administrator felt there was a substantial need to provide vocational orientation for the young disabled person. She expressed an interest in having HRA provide vocational orientation for her program's mentors. She also stated that most of her young clients had never had the opportunity to develop a relationship with a disabled adult and many had never even seen a disabled adult. As a result, their perception of disabled people living independent, productive lives was distorted thus affecting their self-identity and self-esteem. She also stated that she received many calls from parents, educators, and service providers asking if there were any mentor programs for youth with other types of disabilities. She, therefore, felt that the HRA mentor concept of matching disabled industry employees with

disabled students representing the range of disabilities would answer a substantial need for vocational preparation of disabled students.

Mentor, Inc. is a private human service provider which employs the mentor model in a variety of service settings. They, however, do not match disabled students with disabled industry employees in a role model situation. Because of Mentor, Inc.'s extensive experience in operating various types of mentor programs (e.g. foster care, supported work) they provided much needed information concerning program operation issues. The Manager of Program Planning and Development identified several issues to consider including: screening of mentors, establishing program goals for each student and mentor, the matching process, training for the mentors, monitoring the relationships, and transportation.

Screening

The screening of people to act as mentors should not be as major an issue as it is for a Big Brother type of program. The HRA mentor program will involve limited interaction in a specific setting. Because employers and other organizations will identify which of their empoyees or clients are appropriate to act as possible mentors, there is a natural screening process. There will need to be a lot of give and take between the mentor sources and the HRA staff person in order to develop a good pool of mentors.

Program Goals

All of the Mentor, Inc. mentor activities are based on some type of individual service plan. This plan clearly states what are the person's needs, what are the objectives for the person's participation in the program, and what the mentor relationship is expected to provide. The service plan is used as a base for developing a contract with the mentor. Everything the mentor is expected to do is precisely explained. This is critical for several reasons. First, it provides a basis for monitoring the effectiveness of the program. Secondly, it provides an initial orientation to the needs of the client. Finally, it recognizes the importance and capability of the mentor. It is a formal acknowledgement that the mentor can provide a service and meet the needs of another individual.

It was suggested for the HRA mentor program that the mentor relationship be based on the Individual Education Plan (IEP), arising out of vocational goals. If there are no vocational goals in the IEP or they are not specific enough, a supplemental plan might be developed in conjunction with the teacher. The specifics of this plan should help in formulating an appropriate mentor relationship. For example, if a student is having self-image problems, it might be most important to match with a successful person with the same disability, regardless of the job the mentor is performing. On the other hand, where a student has

a strong interest in a particular job area, the mentor's disability may be less important. It was suggested that HRA be flexible about matching. Matching by disability may be too restrictive in some instances. It was also noted that some issues relating to handicapped persons in the workplace are generalizable, e.g. attitudes of supervisors and co-workers, etc.

Matching Process

It is advisable to develop the mentor relationships incrementally after the initial development phase of the program. Developing approximately four mentor matches per month will allow for a more manageable process. The following are some factors to consider in making a match.

- What are the disabilities of the proposed mentor and the student? Do they preclude communication? Do they preclude the match in any other way?
- What is the job performed by the proposed mentor? How does the job match with the interests of the student?
- Are the personalities of the proposed mentor and student complementary?
- Does the mentor and student's available time coincide?

Making a good match requires a lot of effort and savvy on the part of the project coordinator. It would be helpful if this person had some vocational background as well as an ability to present him/herself well to the schools and the mentor resources.

Training for Mentors

An orientation session for the mentors is needed to provide a general introduction to the program, its goals, who is participating, and the evaluation procedures. A general introduction to the students should also be provided concerning needs, IEP objectives and teacher comments. Other information and assistance should be provided on an individual basis.

Monitoring

It was suggested that debriefing sessions be conducted by the project coordinator after the mentor/student meetings. The coordinator should meet with each person separately. The basis for the debriefing sessions should be the service plan/mentor contract. All of the debriefing results should be recorded and an end-of-the-year report on overall program results, issues, problems, and suggestions should be prepared.

Transportation

Transportation was mentioned by all of the service providers as a critical issue which can present a major obstacle for program

success. The Mentor, Inc. representative did not feel it was realistic to depend on the mentors for transportation especially if HRA is focussing on using entry-level people. These people may have a difficult time getting themselves to work and may, in fact, rely on someone else for transportation. Having a student on-site for several hours, showing the student around, explaining work requirements will be a major change in the mentor's work routine. Asking for more than this is probably unrealistic.

Service Provider Interview Findings/Implications for Phase II

- One of the Department of Education goals is to improve the vocational programming options available for special education students.

- Improved vocational preparation of students referred to MRC will help VR job placement efforts.

  Implications

  - A goal of the mentor program is to expand the world of work orientation for special needs students. This satisfies both MRC and Department of Education concerns for improving the vocational preparation of special needs students. This should help in marketing the program.

- There are few entry-level jobs available for high school graduates.

  Implications

  - This finding was supported by the industry interviews. HRA will also need to consider mentors as role models for further education and training.

- There exists an informal job oriented network of former VR clients interested in helping each other and new VR clients.

- VR counselors are supportive of the mentor concept and are interested in working with HRA to develop a pool of mentors.

  Implications

  - The MRC Regional Offices should be a valuable source of potential mentors.

- Employers are often unaware of employees with hidden disabilities including those with learning disabilities or emotional problems which have been overcome.

  Implications

  - This provides additional support to the finding that

HRA will need to utilize a variety of sources to develop a pool of mentors.

- The mentor concept is appropriate for all handicapping conditions, however, matching students with emotional problems may present some difficulties.

  Implications

  - HRA will need to carefully consider each type of handicapping condition and will need to remain flexible in order to make adjustments in the program to overcome problems in recruitment.

- Special education students need to receive a broader range of training than is presently available. Many are inappropriately placed in sheltered workshops. With additional or different training many students could be placed in competitive employment.

- Industry involvement in schools is critical.

  Implications

  - Not only will the mentor program increase a student's understanding of the world of work, school personel's understanding should also increase. This will hopefully lead to vocational programming that more appropriately reflects the needs of industry.

- Disabled students rarely come into contact with disabled adults.

  Implications

  - The lack of disabled role models seriously affects a disabled student's self-identity and feelings of self-confidence. A mentor program would provide much needed contact with disabled adults who lead independent productive lives.

- Transportation is viewed as a critical issue.

  Implications

  - HRA will need to carefully explore with the companies, school systems and service providers methods of transporting the students to the mentor worksites.

The following is a list of program operating procedures which will be carefully considered when developing the Phase II program.

- The screening of mentors should be closely coordinated with the agencies or companies providing the mentors.

- The matching process should be very flexible and should depend on the needs of the student.

- Individual program goals will need to be developed for each student. The IEP may be used.

- A mentor contract will need to be developed in order to clearly explain what will be expected of the mentor.

- The program will be more manageable if the matching process occurs in increments, e.g. four matches per month.

- An orientation session will need to be conducted for both mentors and students.

- Monitoring the relationships is critical to document successes and problems and resolve problems as they occur.

VII. Development of a Mentor Model

The findings of the Phase I feasibility study strongly support the development of a mentor program for disabled students. All of the people contacted concerning the mentor concept responded favorably and often enthusiastically to the idea and felt that it served a critical need for improved vocational programming for disabled students.

As staff solicited comments concerning industry volunteerism, it became clear that most people could readily focus and respond to the concept of mentor relationships. The majority felt that by starting with a specific mentor program it would eventually be possible to expand industry involvement to other aspects of school programming or activities which could involve school personnel training. People also felt that improved coordination between vocational education, vocational rehabilitation and special education could be an additional benefit of the mentor program. The development of a mentor model therefore meets the three Phase I project objectives as listed in section II of this report.

The information gathered in the Phase I study enabled HRA staff to develop a concept for a mentor program which could be initiated in various secondary school settings. The research process also resulted in several industries, service providers and school settings willing to participate in a Phase II program. The positive results and the following three major findings provided the encouragement and information necessary for the development of the Phase II proposal.

School systems are searching for ways to develop relationships with industry in order to improve the vocational preparation and job placement of disabled students. Many high technology companies are receptive to working with schools but lack the

knowledge as to what specifically they can do for schools. Disabled students often have unrealistic perceptions of the work place combined with self-confidence problems in regard to whether or not they can function in a work setting. Finally, disabled youth lack role models of successfully employed disabled adults. The mentor program outlined by HRA for Phase II funding provides one possible method for helping to solve the problems discussed in the Phase I study. It is important to demonstrate that such a program can operate successfully. Therefore, HRA, for the SBIR Phase II study proposed to operate a demonstration mentor program at three different secondary school settings. The results will be captured in a training manual to provide companies and schools with a specific program that can be adapted to local needs and provide a focus for collaboration.

APPENDIX

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THE MENTOR PROJECT: INVOLVING HANDICAPPED EMPLOYEES IN THE TRANSITION OF HANDICAPPED YOUTH FROM SCHOOL TO WORK

CONTRACT NO. 300-84-0175

PROJECT DESCRIPTION

For the U.S. Department of Education, Harold Russell Associates, Inc. (HRA) of Waltham, Massachusetts has undertaken a project aimed at improving the transition of handicapped youth from school to work. The purpose of this project is to conduct a feasibility study to collect information concerning industry volunteerism. Models will be developed for systematically involving disabled employees and their supervisors from high technology and related companies in a mentor role. Model preparation will also focus on the integration of special education, vocational education and vocational rehabilitation resources in order to assure that industry involvement occurs as part of a continuum of services. The major project tasks are as follows:

- development of selection criteria and the identification of school districts to be involved in the study;
- development and conduct of a needs assessment of selected school districts;
- identification of potential companies to become involved in the study;
- conduct interviews of industry personnel to explore the potential for and limits to volunteerism; and
- preparation of a model utilization plan for involvement of industry volunteers as mentors in coordinated programs between special education, vocational education and vocational rehabilitation.

A Project Advisory Committee, including representatives of school districts, local vocational rehabilitation and industry, and state representatives of special education, vocational education and vocational rehabilitation, will provide guidance to the staff throughout the course of the project. The feasibility study will lay the foundation for the preparation of guides, training manuals and presentation materials in order to demonstrate and disseminate models of industry volunteerism.

PROJECT SPONSOR: U.S. Department of Education

PROJECT STAFF: Duncan Ballantyne, Project Manager
Sarah Patton, Principal Investigator
Mary McGee, Senior Associate

Program:

Name and Title
of Person Interviewed:

Address/Phone:

Date of Interview:

Interviewer(s):

School Questionnaire

BACKGROUND INFORMATION

1. Describe the site and characteristics of the district(s) served by the school or special education collaborative.

a) area

b) population

c) number of students

d) number of handicapped students

e) type of industry and business in the area

2. Describe the range of handicapping conditions served by the school or collaborative.

3. Are the majority of handicapped students mainstreamed into the regular courses?

a) Describe any separate programming

Vocational Programming

1. Describe the range of vocational offerings for handicapped students.

a) Pre-vocational and/or vocational preparation

b) Work experience or work/study programs

c) Vocational-technical training

1) Does this occur only in the area Voc-Tech school?

2) Does this also occur in the comprehensive high school(s)?

3) Are the courses competency based?

4) Have any special accommodations been made?

5) Describe any separate vocational-technical courses for handicapped students.

6) Do the Voc-tech courses meet the needs of the local labor market?

d) Other

2. Are the handicapped students mainstreamed into the regular vocational program? If not are the vocational offerings comparable to those for non-handicapped students?

11. Describe any family involvement in vocational programming.

12. Describe any support services provided in conjunction with vocational programming.

Coordination

1. Comment on the interaction between special education and vocational education.

a) Are special education teachers resistant to working on vocational issues?

How has this been resolved?

b) Are vocational teachers resistant to working with handicapped students?

How has this been resolved?

2. Comment on VR involvement with the school(s).

a) Are VR services accessible for handicapped students?

b) Are VR services duplicative of or complementary to special education and or vocational education?

c) Are the IEP's coordinated with the IWRP's?

3. Describe the school's or collaborative's interaction with local employment resources such as JTPA or the ES agency.

4. Describe relationships with other state agencies.

5. Describe the relationship between the vocational-technical school and the comprehensive high school(s) or collaborative.

6. Describe the relationship with the junior high or middle schools.

a) Could the relationship be improved in order to enhance vocational programming for handicapped students?

7. In addition to the existing program, what can the school or collaborative do to improve the vocational preparation of handicapped students in order to aid in their transition from school to work?

INDUSTRY INVOLVEMENT

1. List the major companies in the school's or collaborative's geographic area.

2. Describe any industry involvement in vocational programming for handicapped students?

3. What type of industry involvement would be beneficial for the handicapped students?

a) career days

b) shadowing experiences

c) vocational preparation - interviewing techniques, confidence building, labor market information, job seeking and job keeping skills.

d) networking

e) other

4. The mentor concept is basically to establish a network for handicapped students in order to provide a needed resource for their transition to work. How could the school use or expand on the concept to enhance vocational programming for handicapped students?

5. Describe the mechanisms that would be involved in planning and implementing an industry volunteer program.

a) Designated staff for involvement

b) School policies concerning student time spent with industry employees

c) Number of handicapped students that would benefit from such a program

d) Types of handicapping conditions of students that could benefit from such a program.

6. Comment on the possibility of involving the junior high or middle schools in an industry volunteer program.

6. Describe the company's existing mechanisms which could be used to develop an industry volunteer program for handicapped students.

a) What would be the barriers to starting such a program?

b) What would be the benefits?

7. Comment on whether or not your companies entry level employees would be better prepared for work if the secondary schools had concentrated on vocational preparation training.

INTERVIEWS

HIGH TECHNOLOGY COMPANIES

Digital Equipment Corporation - U.S. Employment Office

Digital Equipment Corporation - Tewksbury Division

Massachusetts Corporate Partnership Program

MITRE Corporation

New England Telephone

Polaroid Company

Raytheon Company - Corporate Headquarters

Raytheon Missile Systems Division in Andover

Raytheon Missile Systems Division in Lowell

INTERVIEWS

SERVICE PROVIDERS

Alternatives Unlimited

Bay State Skills Corporation

Big Brother Association of Boston

COAP - Center for Occupational Awareness and Placement

Governor's Commission on the Employment of the Handicapped

Information Center for Individuals With Disabilities

Massachusetts Commission for the Blind

Massachusetts Department of Education, Division of Special Education

Massachusetts Executive Office of Human Services

Massachusetts Office of Handicapped Affairs

Massachusetts Rehabilitation Commission
- Quincy Regional Office
- Taunton Regional Office
- Lowell Regional Office

Mentor, Inc.

Newton Public Schools, Supported Work Program

Northeast Independent Living Program, Inc.

Partners Project, Boston Center for Independent Living

Projects With Industry - Massachusetts

Supported Work Program in Taunton (Part of Mentor, Inc.)

Transitional Employment Program (TEP) Collaborative

Wellmett Employment Services